IN THE CLAIMS:

Please AMEND claim 53, as follows. For the Examiner's convenience, all claims currently pending in this application have been reproduced below:

1-39. (Cancelled)

40. (Previously Presented) A linear motor apparatus comprising:

a movable member having a magnet; and

a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor (i) has a plurality of partial coils having identical current application/rotation directions, and the plurality of partial coils are formed in such a way that the foil-like conductor forms a continuous, seamless strip, and (ii) is continuously wound in a multilayered, aligned state to form the coil, and adjacent layers of the foil-like conductor are insulated by the insulating layer.

41. (Previously Presented) The linear motor apparatus of claim 40, wherein the plurality of partial coils are separated from each other in a direction of a gap in a magnetic circuit formed between the partial coils and the magnet.

42. (Previously Presented) The linear motor apparatus of claim 41, wherein the foil-like conductor is bent helically among the plurality of partial coils.

43. (Previously Presented) The linear motor apparatus of claim 41, wherein the foil-like conductor is folded at least twice among, and in a direction substantially perpendicular to, the plurality of partial coils.

44. (Previously Presented) The linear motor apparatus of claim 41, wherein the foil-like conductor is extended from the interior of the plurality of partial coils so as to connect the plurality of partial coils.

45. (Previously Presented) A linear motor apparatus comprising:

a movable member having a magnet; and

a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the coil has a plurality of holes through which a coolant can pass in the foil-like conductor, and the insulating layer is provided on an inner surface of each one of the holes.

46. (Previously Presented) The linear motor apparatus of claim 45, wherein the insulating layer is made of one of a polymer material and an oxide film of the foil-like conductor.

47. (Previously Presented) The linear motor apparatus of claim 45, wherein the insulating layer is an insulating film using a paraffin-based fully aromatic polyamide fiber or resin.

48. (Previously Presented) A linear motor apparatus comprising:

a movable member having a magnet; and

a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein an edge portion of the foil-like conductor in a direction of the width of the coil is oxidized.

49-51. (Cancelled)

52. (Previously Presented) A linear motor apparatus comprising:

a movable member having a magnet; and

a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the insulating layer has a width greater than a width of the foil-like conductor.

53. (Currently Amended) A linear motor apparatus comprising:

a movable member having a magnet; and

a plurality of coils wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor having a plurality of coils, and an insulating layer,

wherein the plurality of coils are separated from each other in a direction of a gap in a magnetic circuit formed between the partial coils and the magnet, and

the foil-like conductor is continuously wound in a multilayered, aligned state to form the plurality of coils, and the adjacent layers of the foil-like conductor are insulated by the insulating layer.

54. (Previously Presented) An exposure apparatus for exposing a substrate to a pattern, said apparatus comprising:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor (i) has a plurality of partial coils having identical current application/rotation directions, and the plurality of coils are formed in such a way that the

foil-like conductor forms a continuous, seamless strip, and (ii) is continuously wound in a multilayered, aligned state to form the coil and adjacent layers of the foil-like conductor are insulated by the insulating layer.

55. (Previously Presented) The exposure apparatus of claim 54, wherein the plurality of partial coils are spaced or stacked in a direction of a gap in a magnetic circuit formed between the partial coils and the magnet.

56. (Previously Presented) The exposure apparatus of claim 54, further comprising a reticle stage supporting a master for exposure onto the substrate,

wherein the linear motor apparatus drives the reticle stage.

57. (Previously Presented) The exposure apparatus of claim 54, wherein the linear motor apparatus drives a stage reaction force receiver that is the movable member so as to cancel out a drive reaction torque generated by driving at least one of the wafer stage and the reticle stage.

58. (Previously Presented) The exposure apparatus of claim 54, wherein the linear motor apparatus cancels out vibration generated driving at least one of the wafer stage and the reticle stage by driving a movable damping member so as to prevent the vibration from reaching a projection optical system.

59. (Previously Presented) The exposure apparatus of claim 54, wherein the pattern is projected onto the wafer by an exposure light beam or an electron beam passing through the projection optical system.

60. (Previously Presented) The exposure apparatus of claim 59, wherein the wafer stage moves the wafer to a predetermined position so that the pattern can be projected onto the wafer.

61. (Previously Presented) A semiconductor device manufacturing method comprising the steps of:

installing a plurality of semiconductor manufacturing apparatuses, including an exposure apparatus, in a semiconductor manufacturing factory; and

manufacturing a semiconductor device by using the plurality of semiconductor manufacturing apparatuses,

wherein the exposure apparatus exposes a substrate to a pattern and comprises:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor (i) has a plurality of partial coils having identical current application/rotation directions, and the plurality of partial coils are formed in such a way that the foil-like conductor forms a continuous, seamless strip and (ii) is continuously wound in a multilayered, aligned state to form the coil, and adjacent layers of the foil-like conductor are insulated by the insulating layer.

62. (Previously Presented) An exposure apparatus for exposing a substrate to a pattern, said apparatus comprising:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the coil has a plurality of holes through which a coolant can pass in the foil-like conductor, and the insulating layer is provided on an inner surface of each one of the holes.

63. (Previously Presented) The exposure apparatus of claim 62, wherein the insulating layer is made of one of a polymer material and an oxide film of the foil-like conductor.

64. (Previously Presented) The exposure apparatus of claim 62, wherein the insulating layer is an insulating film using a paraffin-based fully aromatic polyamide fiber or resin.

65. (Previously Presented) The exposure apparatus of claim 62, further comprising a reticle stage supporting a master for exposure onto the substrate,

wherein the linear motor apparatus drives the reticle stage.

66. (Previously Presented) The exposure apparatus of claim 62, wherein the linear motor apparatus drives a stage reaction force receiver that is the movable member so as to cancel out a drive reaction torque generated by driving at least one of the wafer stage and the reticle stage.

67. (Previously Presented) The exposure apparatus of claim 62, wherein the linear motor apparatus cancels out vibration generated by driving at least one of the wafer stage and the reticle stage by driving a movable damping member so as to prevent the vibration from reaching a projection optical system.

68. (Previously Presented) The exposure apparatus of claim 62, wherein the pattern is projected onto the wafer by an exposure light beam or an electron beam passing through the projection optical system.

69. (Previously Presented) The exposure apparatus of claim 62, wherein the wafer stage moves the wafer to a predetermined position so that the pattern can be projected onto the wafer.

70. (Previously Presented) A semiconductor device manufacturing method comprising the steps of:

installing a plurality of semiconductor manufacturing apparatuses, including an exposure apparatus, in a semiconductor manufacturing factory; and

manufacturing a semiconductor device by using the plurality of semiconductor manufacturing apparatuses,

wherein the exposure apparatus exposes a substrate to a pattern and comprises:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the coil has a plurality of holes through which a coolant can pass in the foil-like conductor, and the insulating layer is provided on an inner surface of each one of the holes.

71. (Previously Presented) An exposure apparatus for exposing a pattern onto a substrate, said apparatus comprising:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein an edge portion of the foil-like conductor in the direction of the width of the coil is oxidized.

72. (Previously Presented) The exposure apparatus of claim 71, further comprising a reticle stage supporting a master for exposure onto the substrate,

wherein the linear motor apparatus drives the reticle stage.

73. (Previously Presented) The exposure apparatus of claim 71, wherein the linear motor apparatus drives a stage reaction force receiver that is the movable member so as to cancel out a drive reaction torque generated by driving at least one of the wafer stage and the reticle stage.

74. (Previously Presented) The exposure apparatus of claim 71, wherein the linear motor apparatus cancels out vibration generated when driving at least one of the wafer stage and the reticle stage by driving a movable damping member so as to prevent the vibration from reaching a projection optical system.

75. (Previously Presented) The exposure apparatus of claim 71, wherein the pattern is projected onto the wafer by an exposure light beam or an electron beam passing through the projection optical system.

76. (Previously Presented) The exposure apparatus of claim 71, wherein the wafer stage moves the wafer to a predetermined position so that the pattern can be projected onto the wafer.

77. (Previously Presented) A semiconductor device manufacturing method comprising the steps of:

installing a plurality of semiconductor manufacturing apparatuses, including an exposure apparatus, in a semiconductor manufacturing factory; and

manufacturing a semiconductor device by using the plurality of semiconductor manufacturing apparatuses,

wherein the exposure apparatus exposes a substrate to a pattern and comprises:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein an edge portion of the foil-like conductor in the direction of the width of the coil is oxidized.

78-85. (Cancelled)

86. (Previously Presented) An exposure apparatus for exposing a substrate to a pattern, said apparatus comprising:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the insulating layer has a width greater than a width of the foil-like conductor.

87. (Previously Presented) The exposure apparatus of claim 86, further comprising a reticle stage supporting a master for exposure onto the substrate,

wherein the linear motor apparatus drives the reticle stage.

88. (Previously Presented) The exposure apparatus of claim 86, wherein the linear motor apparatus drives a stage reaction force receiver that is the movable member so as to cancel out a drive reaction torque generated by driving at least one of the wafer stage and the reticle stage.

89. (Previously Presented) The exposure apparatus of claim 86, wherein the linear motor apparatus cancels out vibration generated by driving at least one of the wafer stage and the reticle stage by driving a movable damping member so as to prevent the vibration from reaching a projection optical system.

90. (Previously Presented) The exposure apparatus of claim 86, wherein the pattern is projected onto the wafer by an exposure light beam or an electron beam passing through the projection optical system.

91. (Previously Presented) The exposure apparatus of claim 86, wherein the wafer stage moves the wafer to a predetermined position so that the pattern can be projected onto the wafer.

92. (Previously Presented) A semiconductor device manufacturing method comprising the steps of:

installing a plurality of semiconductor manufacturing apparatuses, including an exposure apparatus, in a semiconductor manufacturing factory; and

manufacturing a semiconductor device by using the plurality of semiconductor manufacturing apparatuses,

wherein the exposure apparatus exposes a substrate to a pattern and comprises:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multi-layered structure formed by winding a foil-like conductor and an insulating layer,

wherein the insulating layer has a width greater than a width of the foil-like conductor.

93-99. (Cancelled)

100. (Previously Presented) A linear motor comprising:

a movable member having a magnet; and

a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multilayered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor is a cladding member with a multilayered structure made up of conductors of different materials.

101. (Previously Presented) The linear motor apparatus of claim 100, wherein the conductors of different materials include a copper foil and an aluminum foil.

102. (Previously Presented) The linear motor apparatus of claim 100, wherein the conductors of different materials include a conductive material and a high-permeability material.

103. (Previously Presented) An exposure apparatus for exposing a substrate to a pattern, said apparatus comprising:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multilayered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor is a cladding member with a multilayered structure made up of conductors of different materials.

104. (Previously Presented) A semiconductor device manufacturing method comprising the steps of:

installing a plurality of semiconductor manufacturing apparatuses, including an exposure apparatus, in a semiconductor manufacturing factory; and

manufacturing a semiconductor device by using the plurality of semiconductor manufacturing apparatuses,

wherein the exposure apparatus exposes a substrate to a pattern and comprises:

a wafer stage; and

a linear motor apparatus for driving the wafer stage,

wherein the linear motor apparatus comprises:

(i) a movable member having a magnet; and

(ii) a coil wound about the magnet so as to generate a drive force for driving the movable member and having a multilayered structure formed by winding a foil-like conductor and an insulating layer,

wherein the foil-like conductor is a cladding member with a multilayered structure made up of conductors of different materials.